

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number
WO 2005/070992 A2

(51) International Patent Classification⁷: C08G 61/00

(21) International Application Number:
PCT/JP2005/001438

(22) International Filing Date: 26 January 2005 (26.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2004-018357 27 January 2004 (27.01.2004) JP

(71) Applicant (for all designated States except US): CANON
KABUSHIKI KAISHA [JP/JP]; 3-30-2, Shimomaruko,
Ohta-ku, Tokyo, 1468501 (JP).

(72) Inventor; and

(75) Inventor/Applicant (for US only): NAKAMURA,
Shinichi [JP/JP]; c/o CANON KABUSHIKI KAISHA,
3-30-2, Shimomaruko, Ohta-ku, Tokyo, 1468501 (JP).

(74) Agents: OKABE, Masao et al.; No. 602 Fuji Building,
2-3, Marunouchi 3-chome, Chiyoda-ku, Tokyo 100-0005
(JP).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

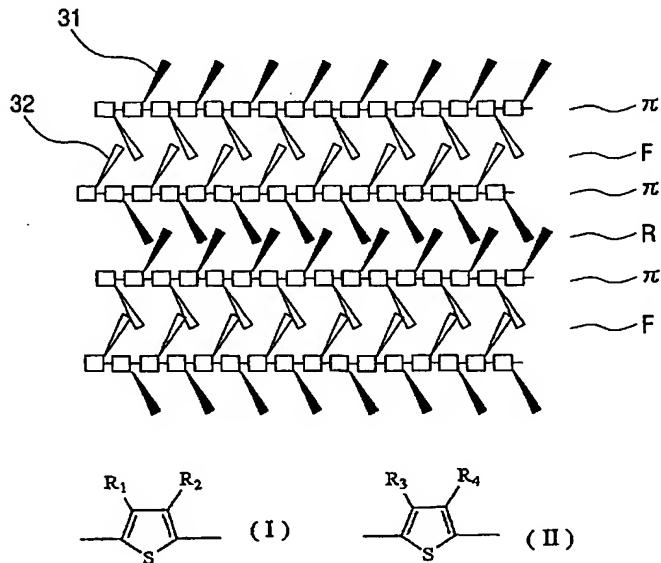
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: π -CONJUGATED COMPOUND, CONDUCTIVE ORGANIC THIN FILM CONTAINING THE COMPOUND, AND FIELD-EFFECT TYPE ORGANIC TRANSISTOR EMPLOYING THE THIN FILM



(57) Abstract: A π -conjugated compound has rings represented by Formulae (I) and (II), an odd number of rings being interposed between the rings of Formula (I), and an odd number of rings being interposed between the rings of Formula (II): where R₁ and R₂ are hydrogen or a substituted or unsubstituted linear, cyclic, or branched alkyl group of 1 to 20 carbon atoms, at least one of R₁ and R₂ being not hydrogen; and R₃ and R₄ are hydrogen or a substituted or unsubstituted linear, cyclic, or branched perfluoroalkyl group of 1 to 20 carbon atoms.

WO 2005/070992 A2